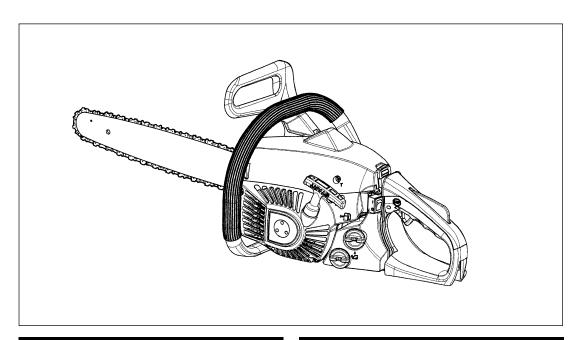


# **OWNER/OPERATOR MANUAL**

# **CHAINSAWS**

G3200 G3200EZ



## $oldsymbol{\Lambda}$

## **WARNING**

1

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



## **WARNING**

Ų

Before using our products, please read this manual carefully to understand the proper use of your unit.

APPLICABLE SERIAL NUMBERS:

G3200: 404766 and up G3200EZ: 400001 and up



## A SAFETY FIRST

Instructions contained in warnings within this manual marked with a A symbol concern critical points which must be taken into consideration to prevent possible serious bodily injury, and for this reason you are requested to read all such instructions carefully and follow them without fail.

#### **■ WARNINGS IN THE MANUAL**



This mark indicates instructions which must be followed in order to prevent accidents which could lead to serious bodily injury or death.



This mark indicates instructions which must be followed, or it leads to mechanical failure, breakdown, or damage.

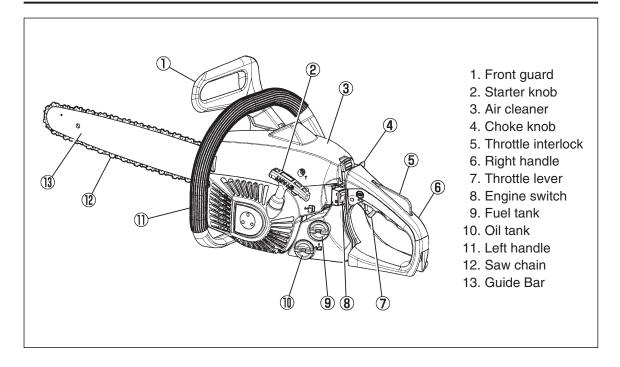
# 

This mark indicates hints or directions useful in the use of the product.

#### **CONTENTS**

1.	Parts location	4
2.	Specifications	4
3.	Symbols on the machine	5
4.	For safe operation	6
5.	Installing guide bar and saw chain	8
6.	Fuel and chain oil	11
	Operation	
8.	Sawing	17
9.	Maintenance	20
10.	Maintenance of Saw Chain and Guide Bar	23
11.	Troubleshooting Guide	25
12.	Storage	26
13	Parts list	27

## 1. Parts location



## 2. Specifications

#### ■ G3200 / G3200EZ

Power unit :
Displacement
Fuel Mixture (Gasoline 50 : 2-cycle oil 1)
Fuel tank capacity 9.13(0.27) fl.oz( $\ell$ )
Chain oil ····· Motor oil SAE #10W-30
Oil tank capacity 6.76(0.20) fl.oz( $\ell$ )
Carburetor Diaphragm type (Walbro WT)
Ignition system Pointless (CDI)
Spark plug ····· Champion RCJ-7Y
Oil feeding system ····· Automatic pump
Sprocket: Pitch – No. of teeth
Dimensions: L – W – H
Dry weight
Cutting attachment :

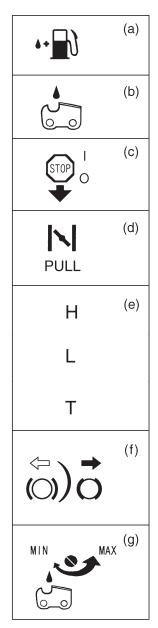
Saw chain: Type - Pitch - Gauge ...... G3200: Oregon 25AP - 1/4(6.35) - 0.050(1.27) in(mm)

Specifications are subject to change without notice.

...... G3200EZ: Oregon 91VG - 3/8(9.53) - 0.050(1.27) in(mm)

------ G3200EZ: Sprocket nose - 14(35) in(cm)

## 3. Symbols on the machine



## **A**WARNING

For safe operation and maintenance, symbols are carved in relief on the machine.

According to these indications, please be careful not to take a mistake.

(a). The port to refuel the "MIX GASOLINE"

Position: Fuel cap

(b). The port to refuel the chain oil

Position: Oil cap

(c). Put the switch to the "O" position, immediately the engine stops.

Position: Rear-left of the unit

(d). If you pull out the choke knob, you can set the choke as a cold start mode.

Position: Upper-right of the aircleaner cover

(e). The screw under the "H" stamp is The High-speed adjustment screw

The screw under the "L" stamp is The Slow-speed adjustment screw

The screw at the left of the "T" stamp is the Idle adjustment screw

Position: Left side of the rear handle

(f). It shows the directions that the chain brake is released (for the white arrow) and activated (for the black arrow).

Position: Front of the chain cover

(g) If you turn the rod by screwdriver follow the arrow to the "MAX" position, the chain oil flow more, and if you turn to the "MIN" position, less.

Position: Bottom of the power unit

IMPORTANT ENGINE INFORMATION
THIS ENGINE CONFORMS TO US EPA
PH1 FOR SMALL OFF-ROAD ENGINES.
ENGINE FAMILY: 4KZXS. 0324RS:EM
ENGINE DISPLACEMENT: 32cc
REFER TO OWNER'S MANUMAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.
MANUFACTURED:

**EXAMPLE 2 KOMATSU ZENDAH CO. RedMax** Made in Japan

INFORMATION IMPORTANTE CONCERNANT LE MOTEUR
Ce moteur conforme aux normes U.S. EPA
PH1 pour les petits moteurs tout-terrain.
Type de moteur: 4KZXS. 0324RS:EM

**Cylindrée du moteur : 32cc** Se référer au Manuel de l'utilisateur pour les spécifications d'entretien et les réglages.

Manufacturé:

KOMATSU ZENDAH CO.
RedMax Made in Japan



## 4. For safe operation

- Never operate a chain saw when you are fatigued, ill, or upset, or under the influence of medication that may make you drowsy, or if you are under the influence of alcohol or drugs.
- Use safety footwear, snug fitting clothing and eye, hearing and head protection devices.
- 3. Select flat and bare ground for fueling.
- Always use caution when handling fuel.
   Wipe up all spills and then move the chain saw at least ten(10) feet(three(3) m) from the fueling point before starting the engine.
  - 4a) Eliminate all sources of sparks or flame (ie. smoking, open flames, or work that can cause sparks) in the areas where fuel is mixed, poured, or stored.
  - 4b) Do not smoke while handling fuel or while operating the chain saw.
- 5. Do not allow other persons to be near the chain saw when starting the engine or cutting a wood. Keep bystanders and animals out of the work area. Children, pets, and bystanders should be a minimum of thirty(30) feet away when you start or operate the chain saw.
- Never start cutting until you have a clear work area, secure footing, and planned retreat path from the falling tree.
- 7. Always hold the chain saw firmly with both hands when the engine is running. Use a firm grip with thumb and fingers encircling the chain saw handles.
- Keep all parts of your body away from the saw chain when the engine is running.

- 9. Before you start the engine, make sure the saw chain is not contacting anything.
- Always carry the chain saw with the engine stopped, the guide bar and saw chain to the rear, and the muffler away from your body.
- 11. Always inspect the chain saw before each use for worn, loose, or changed parts. Never operate a chain saw that is damaged, improperly adjusted, or is not completely and securely assembled. Be sure that the saw chain stops moving when the throttle control trigger is released.
- 12. All chain saw service, other than the items listed in the Operator's Manual, should be performed by competent chain saw service personnel. (e.g., if improper tools are used to remove the flywheel, or if an improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur which could subsequently cause the flywheel to disintegrate).
- Always shut off the engine before setting it down.
- 14. Use extreme caution when cutting small size brush and saplings because slender material may catch the saw chain and be whipped toward you or pull you off balance.
- 15. When cutting a limb that is under tension, be alert for spring back so that you will not be struck when the tension in the wood fibers is released.
- 16. Keep the handles dry, clean and free of oil or fuel mixture.



## 4. For safe operation

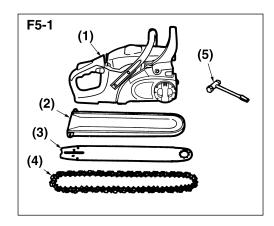
- 17. Operate the chain saw only in well ventilated areas. Never start or run the engine inside a closed room or building. Exhaust fumes contain dangerous carbon monoxide.
- 18. Do not operate a chain saw in a tree unless specially trained to do so.
- 19. Guard against kickback. Kickback is the upward motion of the guide bar which occurs when the saw chain at the nose of the guide bar contacts an object. Kickback can lead to dangerous loss of control of the chain saw.
- 20. When transporting your chain saw, make sure the appropriate guide bar scabbard is in place.
- 21. This chain saw is equipped with a spark arrester built-in muffler. Periodically check the arrester to keep it in good order.

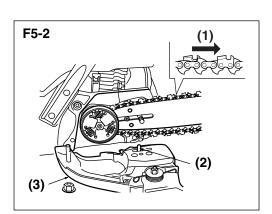
#### KICKBACK SAFETY PRECAUTIONS FOR CHAIN SAW USERS

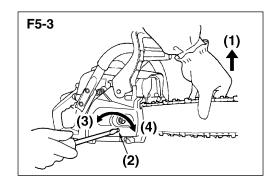
## **A**WARNING

- Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut. Tip contact in some cases may cause a lightning fast reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the saw which could result in serious personal injury.
- Do not rely exclusively on the safety devices built into your saw. As a chain saw user you should take several steps to keep cutting jobs free from accident or injury.
  - (1) With a basic understanding of kickback you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
  - (2) Keep a good grip on the saw with both hands, the right hand on the rear handle, and the left hand on the front handle, when the engine is running. Use a firm grip with thumbs and fingers encircling the chain saw handles. A firm grip will help you reduce kickback and maintain control of the saw. Don't let go.
  - (3) Make certain that the area in which you're cutting is free from obstructions. Do not let the nose of the guide bar contact a log, branch, or any other obstruction which could be hit while you are operating the saw.
  - (4) Cut at high engine speeds.
  - (5) Do not overreach or cut above shoulder height.
  - (6) Follow manufacturers sharpening and maintenance instructions for saw chain.
  - (7) Only use replacement bars and chains specified by the manufacturer or the equivalent.

## 5. Installing guide bar and saw chain







A standard saw unit package contains the items as illustrated.

- (1) Power unit (2) Bar protector (3) Guide bar
- (4) Saw chain (5) Plug wrench

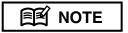
Open the box and install the guide bar and the saw chain on the power unit as follows:



The saw chain has very sharp edges. Use thick protective gloves for safety.

#### [G3200]

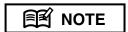
- 1. Pull the guard towards the front handle to check that the chain brake is not engaged.
- 2. Loosen the nut and remove the chain cover.
- Gear the chain to the sprocket and, while fitting the saw chain around the guide bar, mount the guide bar to the power unit. Adjust the position of the chain tensioner.
- (1) Moving direction (2) Tensioner nut
- (3) Chain cover



Pay attention to the correct direction of the saw chain.

- 4. Fit the chain cover to the power unit and fasten the nuts to finger tightness.
- While holding up the tip of the bar, adjust the chain tension by turning the tensioner screw until the tie straps just touch the bottom side of the bar rail.
- (1) Lift UP (2) Tensioner screw
- (3) Loosen (4) Tighten
- Tighten the nut securely with the bar tip held up (12 ~ 15 N·m). Then check the chain for smooth rotation and proper tension while moving it by hand. If necessary, readjust with the chain cover loose.
- 7. Tighten the tensioner screw.

## 5. Installing guide bar and saw chain



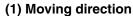
A new chain will expand its length in the beginning of use. Check and readjust the tension frequently as a loose chain can easily derail or cause rapid wear of itself and the guide bar.



- 1. Pull the guard towards the front handle to check that the chain brake is not engageg.
- 2. Loosen the nut assembly and dismount the chain cover.



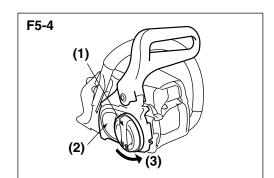
- (2) Chain cover
- (3) Loosen
- Set the guide bar to the power unit, gear the chain to the sprocket of clutch drum and fit it into the groove of the bar and the sprocket at the tip of the bar.

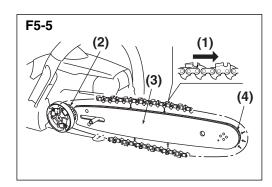


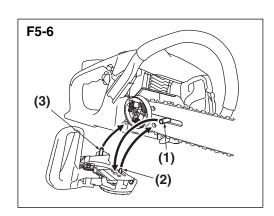
- (2) Sprocket of the clutch drum
- (3) Guide bar
- (4) Sprocket of the bar

## **A**WARNING

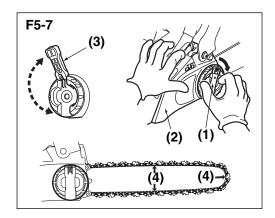
- Pay attention to the correct direction of the saw chain.
- Make sure to fit the chain into the groove of the bar and the sprocket. If not, you may fail to tighten the chain.
- 4. Move the guide bar back and forth to adjust the position of projection A, B and C to fit in each hole. By inserting the projections into the bottom of holes, attach the chain cover securely.
- (1) Projection A
- (2) Projection B
- (3) Projection C

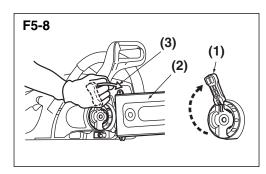


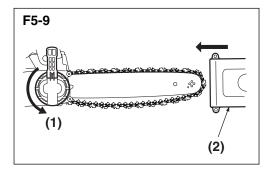




## 5. Installing guide bar and saw chain







## IMPORTANT

While temporary tightening, you may hear the "click" sound. But do not stop tightening at that time. This sound does not mean that the saw chain and guide bar were assembled.

While holding the chain cover, temporary tighten the nut assembly and fix the bar and chain cover. (You can fix them even by tightening the lever.)

Check if the saw chain fits on the bar rail. If not, readjust by loosen the nut assembly.

- (1) Nut assembly (2) Chain cover
- (3) Lever (4) Proper tension, No gap
- After fixing them, attach the bar protector for your safety.

Pull the lever up and tighten it securely.

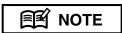
Tightening torque: 7.9 ~ 12.8 N⋅m {80~130kgf-cm}

- (1) Lever (2) Bar protector
- (3) Fully tighten
- 7. If the chain becomes loose while using the unit, attach the bar protector and loosen the nut assembly around 4 turns.

Dismount the protector and check if the chain fits on the bar rail. If not, readjust by loosen the nut assembly.

Temporary tighten the nut assembly. The chain is to be tensioned automatically. After fixing the guide bar, mount the protector and tighten the lever securely for fully tightening.

- (1) Loosen
- (2) Bar protector



A new chain will expand its length in the beginning of use. Check and readjust the tension frequently as a loose chain can easily derail or cause rapid wear of itself and the guide bar.

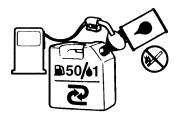
## 6. Fuel and Chain oil

## **A**WARNING

 Gasoline is very flammable. Avoid smoking or bringing any flame or sparks near fuel. Make sure to stop the engine and allow it cool before refueling the unit. Select outdoor bare ground for fueling and move at least 3m (10ft) away from the fueling point before starting the engine.



- The RedMax engines are lubricated by oil specially formulated for air-cooled 2-cycle gasoline engine use. If RedMax oil is not available, use an anti-oxidant added quality oil expressly labeled for air-cooled 2-cycle engine use. (JASO FC GRADE OIL or ISO EGC GRADE)
- Do not use BIA or TCW (2-stroke watercooling type) mixed oil.



# ■ RECOMMENDED MIXING RATIO GASOLINE 50:OIL 1

50:1 MIXING CHART										
gal.	1	2	3	4	5					
L fl.oz	2.6	5.2	7.8	10.4	13					
liter	1	2	3	4	5					
L ml	20	40	60	80	100					
	gal. L fl.oz	gal. 1 L fl.oz 2.6	gal. 1 2 L fl.oz 2.6 5.2 liter 1 2	gal. 1 2 3 L fl.oz 2.6 5.2 7.8 liter 1 2 3	gal. 1 2 3 4 L fl.oz 2.6 5.2 7.8 10.4 liter 1 2 3 4					

- Exhaust emission are controlled by the fundamental engine parameters and components(eq., carburation, ignition timing and port timing) without addition of any major hardware or the introduction of an inert material during combustion.
- These engines are certified to operate on unleaded gasoline.
- Make sure to use gasoline with a minimum octane number of 89 RON (USA/Canada: 87AL)
- If you use a gasoline of a lower octane value than prescribed, there is a danger that the engine temperature may rise and an engine problem such as piston seizing may consequently occur.
- Unleaded gasoline is recommended to reduce the contamination of the air for the sake of your health and the environment.
- Poor quality gasolines or oils may damage sealing rings, fuel lines or fuel tank of the engine.

#### **■ HOW TO MIX FUEL**



Pay attention to agitation.

- 1. Measure out the quantities of gasoline and oil to be mixed.
- 2. Put some of the gasoline into a clean, approved fuel container.
- 3. Pour in all of the oil and agitate well.
- 4. Pour In the rest of gasoline and agitate

## 6. Fuel and Chain oil

again for at least one minute. As some oils may be difficult to agitate depending on oil ingredients, sufficient agitation is necessary for the engine to last long. Be careful that, if the agitation is insufficient, there is an increased danger of early piston seizing due to abnormally lean mixture.

- Put a clear indication on the outside of the container to avoid mixing up with gasoline or other containers.
- 6. Indicate the contents on outside of container for easy identification.

#### **■ FUELING THE UNIT**

- 1. Untwist and remove the fuel cap. Rest the cap on a dustless place.
- 2. Put fuel into the fuel tank to 80% of the full capacity.
- 3. Fasten the fuel cap securely and wipe up any fuel spillage around the unit.

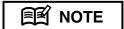
## **A**WARNING

- 1. Select bare ground for fueling.
- 2. Move at least 10feet (3meters) away from the fueling point before starting the engine.
- Stop the engine before refueling the unit. At that time, be sure to sufficiently agitate the mixed gasoline in the container.

#### FOR YOUR ENGINE LIFE, AVOID;

- FUEL WITH NO OIL(RAW GASOLINE) –
   It will cause severe damage to the internal
   engine parts very quickly.
- GASOHOL It can cause deterioration of rubber and/or plastic parts and disruption of engine lubrication.
- 3. OIL FOR 4-CYCLE ENGINE USE It can cause spark plug fouling, exhaust port blocking, or piston ring sticking.
- 4. Mixed fuels which have been left unused for a period of one month or more may clog the carburetor and result in the engine failing to operate properly.

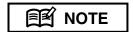
- 5. In the case of storing the product for a long period of time, clean the fuel tank after rendering it empty. Next, activate the engine and empty the carburetor of the composite fuel.
- In the case of scrapping the used mixed oil container, scrap it only at an authorized repository site.



As lot details of quality assurance, read the description in the section Limited Warranty carefully. Moreover, normal wear and change in product with no functional influence are not covered by the warranty. Also, be careful that, if the usage in the instruction manual is not observed as to the mixed gasoline, etc. described therein, it may not be covered by the warranty.

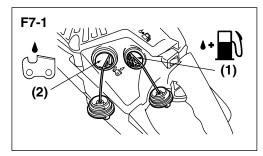
#### **■ CHAIN OIL**

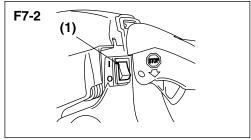
Use motor oil SAE 10W-30 all year round, or SAE 30-40 in summer and SAE 20 in winter.

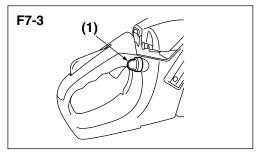


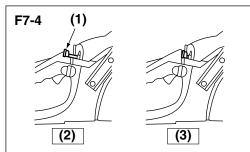
Do not use waste or regenerated oil that can cause damage to the oil pump.

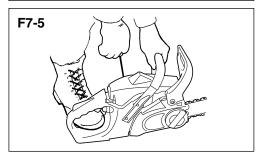












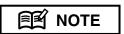
## **A**WARNING

It is very dangerous to run a chainsaw that mounts broken parts or lacks any parts.

Before starting engine, make sure that all the parts including bar and chain are installed properly.

#### **■ STARTING THE ENGINE**

- 1. Fill fuel and chain oil tanks respectively, and tighten the caps securely.
- (1) Fuel (2) Chain oil
- 2. Set the switch to "I" position.
- (1) Switch
- 3. Continuously push the priming bulb until fuel comes in the bulb.
- (1) Priming bulb
- 4. Pull out the choke knob completely to close the choke.
- (1) Choke knob (2) Close (3) Open



When restarting immediately after stopping the engine, you need not to pull out the choke knob.

5. While holding the saw unit securely on the ground, pull the starter rope vigorously.



Do not start the engine while the chain saw hangs in one hand. The saw chain may touch your body. This in very dangerous.

- 6. When engine has ignited, pull the throttle slightly to return the choke knob to the original position. If the engine stops, pull the starter again without pulling out the choke knob.
- 7. Allow the engine to warm up with the throttle lever pulled slightly.



Keep clear of the saw chain as it will start rotating upon starting of engine.

#### **■ CHECKING THE OIL SUPPLY**



Make sure to set up the bar and the chain when checking the oil supply.

If not, the rotating parts may be exposed. It is very dangerous.

After starting the engine, run the chain at medium speed and see if chain oil is scattered off as shown in the figure.

#### (1) Chain oil

The chain oil flow can be changed by inserting a screwdriver in the hole on bottom of the clutch side.

Adjust according to your work conditions.

#### (1) Rich (2) Lean (3) Chain oil flow adjusting

#### ■ ADJUSTING THE CARBURETOR

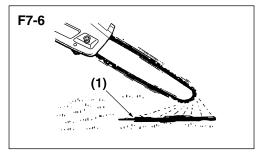
The carburetor on your unit has been factory adjusted, but may require fine tuning due to a change in operating conditions.

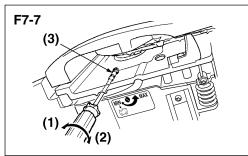
Before adjusting the carburetor, make sure that the provided air/fuel filters are clean and fresh and the fuel properly mixed.

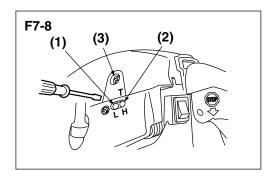
When adjusting, take the following steps:

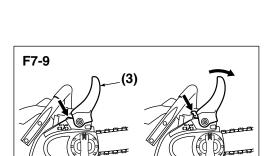


Be sure to adjust the carburetor with the bar chain attached.



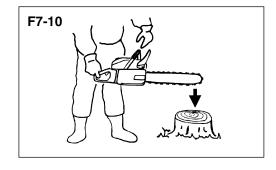






(2)

(1)



1. H and L needles are restricted within the number of turn as shown below.

H needle -1/4 L needle -1/4

- 2. Start engine and allow it to warm up in low speed for a few minutes.
- 3. Turn idle adjusting screw (T) counter-clockwise so that saw chain does not turn. If idling speed is too slow, turn the screw clockwise.
- 4. Make a test cut adjust the H needle for best cutting power, not for maximum speed.
- (1) L needle (2) H needle
- (3) Idle adjusting screw

#### **■ CHAIN BRAKE**

This machine is equipped with an automatic brake to stop saw chain rotation upon occurrence of kickback during saw cutting. The brake is automatically operated by inertial force, which acts on the weight fitted inside the front guard.

This brake can also be operated manually with the front guard turned down to the guide bar.

To release the brake, pull up the front guard toward the front handle till a "click" sound is heard.

(1) Release (2) Activate (3) Front guard



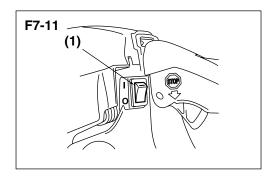
Be sure to confirm brake operation during daily inspection.

#### How to confirm:

- 1) Turn off the engine.
- 2) Holding the chain saw horizontally, release your hand from the front handle, hit the tip of the guide bar to a stump or a piece of wood, and confirm brake operation. Operating level varies by bar size.

In case the brake is not effective, ask our dealer for inspection and repairs.

If the engine keeps rotating at high speed with the brake engaged, the clutch will overheat causing trouble.



When the brake engages during operation, immediately release the throttle lever to stop the engine.

#### **■ STOPPING THE ENGINE**

- 1. Release the throttle lever to allow the engine to idle for a few minutes.
- 2. Set the switch to the "O" (STOP) position.

#### (1) Switch

#### **■ CARBURETOR ANTI-FREEZE MECHANISM**

Operating chain saws in temperatures of  $0-5^{\circ}\text{C}$  at times of high humidity may result in ice forming within the carburetor, and this in turn may cause the output power of the engine to be reduced or for the engine to fail to operate smoothly.

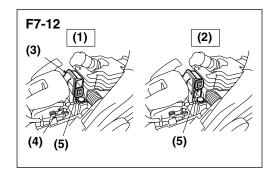
This product has accordingly been designed with a ventilation hatch on the right side of the surface of the insulator cover to allow warm air to be supplied to the engine and to thereby prevent icing from occurring.

Under normal circumstances the product should be used in the normal operating mode, i.e., in the mode to which it is set at the time of shipment. However when the possibility exists that icing may occur, the unit should be set to operate in the antifreeze mode before use.

Stop the engine, remove the cylinder cover and install the grommet A to the appropriate position of the mode.

See ■ Maintenance part for how to remove the cylinder cover.

- (1) Normal operation mode
- (2) Anti-freeze mode
- (3) Insulator
- (4) Carburetor (5) Grommet A

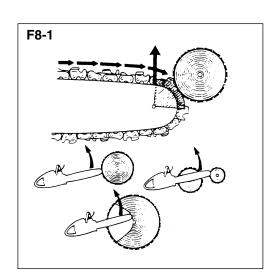


## **A**WARNING

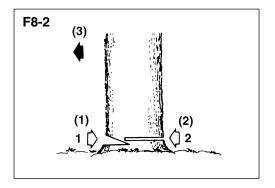
- Before proceeding to your job, read "For Safe Operation" section It is recommended to first practice sawing easy logs. This also helps you get accustomed to your unit.
- Always follow the safety regulations. The chain saw must only be used for cutting wood. It is forbidden to cut other types of material. Vibrations and kickback vary with different materials and the requirements of the safety regulations would not be respected. Do not use the chain saw as a lever for lifting, moving or splitting objects. Do not lock it over fixed stands. It is forbidden to hitch tools or applications to the P.t.o. that are not specified by the manufacturer.
- It is not necessary to force the saw into the cut. Apply only light pressure while running the engine at full throttle.
- When the saw chain is caught in the cut, do not attempt to pull it out by force, but use a wedge or a lever to open the way.



- This saw is equipped with a chain brake that will stop the chain in the event of kickback if operating properly. You must check the chain brake operation before each usage by running the saw at full the throttle for I -2 seconds and pushing the front hand guard forward. The chain should stop immediately with the engine at full speed. If the chain is slow to stop or does not stop, replace the brake band and clutch drum before use.
- It is extremely important that the chain brake be checked for proper operation before each use and that the chain be sharp in order to maintain the kickback safety level of this saw. Removal of the safety devices, inadequate maintenance, or incorrect replacement of the bar or chain may increase the risk of serious personal injury due to kickback.



## 8. Sawing



#### **■** FELLING A TREE (F8-2)

- Decide the felling direction considering the wind, lean of the tree, location of heavy branches, ease of job after felling and other factors.
- 2. While clearing the area around the tree, arrange a good foothold and retreat path.
- 3. Make a notch cut one-third of the way into the tree on the felling side.
- 4. Make a felling cut from the opposite side of the notch and at a level slightly higher than the bottom of the notch.

# **A**WARNING

When you fell a tree, be sure to warn your neighboring workers of the danger.

- (1) Notch cut
- (2) Felling cut
- (3) Felling direction

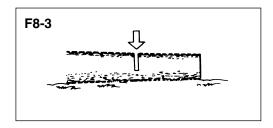
#### **Bucking and Limbing**

## **A**WARNING

- Always ensure your foothold. Do not stand on the log.
- Be alert to the rolling over of a cut log.
   Especially when working on a slope, stand on the uphill side of the log.
- Follow the instructions in "For Safe Operation" to avoid kickback of the saw.

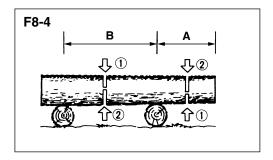
Before starting work, check the direction of bending force inside the log to be cut. Always finish cutting from the opposite side of bending direction to prevent the guide bar from being caught in the cut.

## 8. Sawing



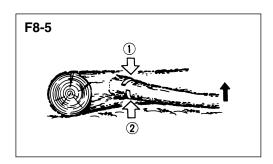
#### A Log lying on the ground (F8-3)

Saw down halfway, then roll the log over and cut from the opposite side.



#### A Log hanging off the ground (F8-4)

In area A, saw up from the bottom one-third and finish by sawing down from the top. In area B, saw down from the top one-third and finish by sawing up from the bottom.

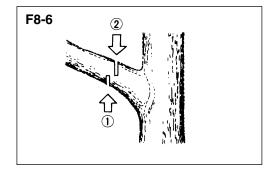


#### **Cutting Limb of Fallen Tree (F8-5)**

First check to which side the limb is bent. Then make the initial cut from the bent side and finish by sawing from the opposite side.



Be alert to the springing back of a cut limb.



#### **Pruning of Standing Tree (F8-6)**

Cut up from the bottom, finish down from the top.



- Do not use an unstable foothold or ladder.
- Do not overreach.
- Do not cut above shoulder height.
- Always use your both hands to grip the saw.

## 9. Maintenance

Maintenance, replacement, or repair of the emission control device and systems may be performed by any non-road engine repair establishment or individual.



Before cleaning, the inspecting or repairing the unit, make sure that engine has stopped and is cool. Disconnect the spark plug to prevent accidental starting.



#### 1. Oiling port

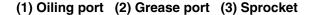
Dismount the guide bar and check the oiling port for clogging.

#### (1) Oiling port

#### 2. Guide bar

When the guide bar is dismounted, remove sawdust in the bar groove and the oiling port.

Grease the nose sprocket from the feeding port on the tip of the bar.



#### 3. Others

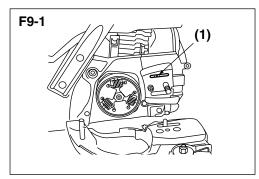
Check for fuel leakage and loose fastenings and damage to major parts, especially handle joints and guide bar mounting. If any defects are found, make sure to have them repaired before operating the saw again.

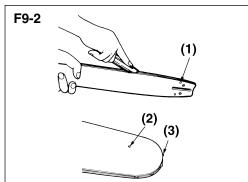
# ■ PERIODICAL SERVICE POINTS (Every 25 hours use)

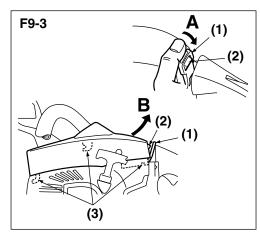
#### 1. Air cleaner

- Loosen the knob by moving it to the direction A until it clicks.
- 2. Pull the cover to the direction B and unfasten the hooks so that the cover can be detached.
- When fixing the cylinder cover back into its original position, align the 3 hooks(3), move the cover in the opposite direction of removal until it clicks.

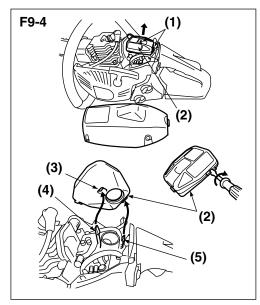


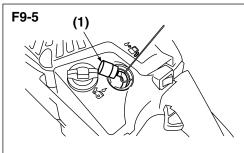


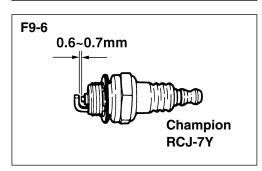


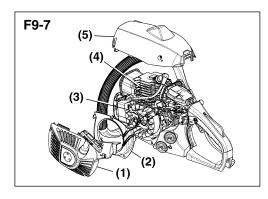


## 9. Maintenance









4. Remove the cleaner element by unfastening the hooks. Split the element into halves and wash in neutral detergent and warm water. After cleaning, dry the element completely.

Exchange the element with new one in case it has been contaminated.

When reinstalling the element to the unit, fit the hook A and the hole, and then inset the element to the unit.

- (1) Hooks
- (2) Air cleaner element
- (3) Hole
- (4) Hook A
- (5) Hook B

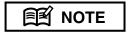


Make sure that the hook A is correctly fit with the hole to reduce the chance of damage of the hook Α.

#### 2. Fuel filter

Using a wire hook, take out the filter from the filler port. Clean away the dirt attached to the filter. Replace with a new one if needed.

#### (1) Fuel filter



Never bend the filter pipe when returning it.

#### 3. Spark plug

Clean the electrodes with a wire brush and reset the gap to 0.65 mm as necessary.

#### 1. Air cooling system

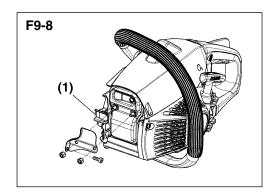
Dust clogging around the cooling system and the cylinder fins will cause overheating of the engine. Periodically check and clean the cooling system and the cylinder fins with a brush after removing the cylinder cover, the air cleaner and the recoil case. When installing the cylinder cover and the cooling system, make sure that switch wires and grommets are positioned correctly in place.

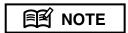
- (1) Recoil case
- (2) Fan cover

(3) Fan

- (4) Cylinder fins
- (5) Cylinder cover

## 9. Maintenance



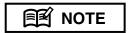


Be sure to block the air intake hole.

#### 2. Spark arrester

The muffler is equipped with a spark arrester to prevent red hot carbon from flying out of the exhaust outlet. Periodically check and clean as necessary with a wire brush after removing two muffler cover nuts and one screw.

#### (1) Spark arrester



Never use a muffler if the spark arrester is missing or defective.

#### 3. Exhaust port

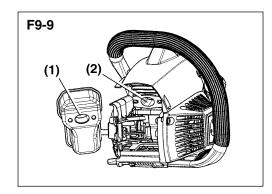
Remove the muffler, insert a screwdriver into the vent, and wipe away any carbon buildup after every 100 hours of use. Wipe away any carbon buildup on the muffler exhaust vent and the cylinder exhaust port at the same time.

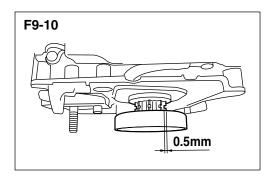
#### (1) Muffler exhaust vent

(2) Cylinder exhaust port

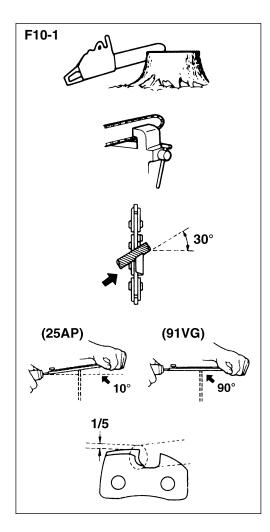
#### 5. Sprocket

Check for cracks and for excessive wear interfering with the chain drive. If the wear is considerable, replace it with new one. Never fit a new chain on a worn sprocket, or a worn chain on a new sprocket.





## 10. Maintenance of Saw Chain and Guide Bar



# F10-2 (1) (2) 25AP (3) 91VG .025" (0.64mm)

#### **■ SAW CHAIN**

## **A**WARNING

It is very important for smooth and safe operation to keep the cutters always sharp.

Your cutters need to be sharpened when:

- Sawdust becomes powder-like.
- You need extra force to saw in.
- · The cut way does not go straight.
- · Vibration increases.
- Fuel consumption increases.

#### **Cutter setting standards:**



Be sure to wear safety gloves.

#### Before filing:

- · Make sure the saw chain is held securely.
- Make sure the engine is stopped.
- Use a round file of proper size for your chain.

Chain type: 25AP, 91VG
File size: 5/32 in (4.0mm)

Place your file on the cutter and push straight forward. Keep the file position as illustrated. (F10-1)

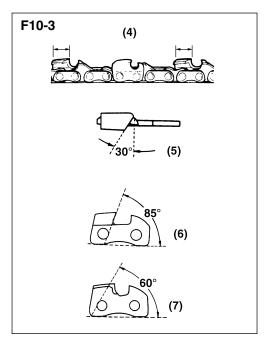
After every cutter has been set, check the depth gauge and file it to the proper level as illustrated. (F10-2)

## **A**WARNING

Be sure to round off the front edge to reduce the chance of kickback or tie-strap breakage.

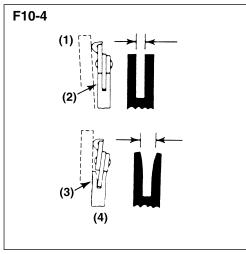
- (1) Appropriate gauge checker
- (2) Make the shoulder round
- (3) Depth gauge standard

## 10. Maintenance of Saw Chain and Guide Bar



Make sure every cutter has the same length and edge angles as illustrated. (F10-3)

- (4) Cutter length
- (5) Filing angle
- (6) Side plate angle
- (7) Top plate cutting angle

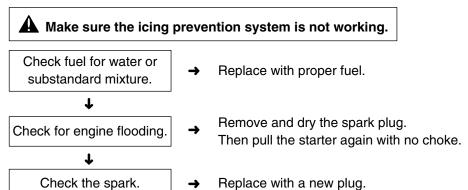


#### **■ GUIDE BAR**

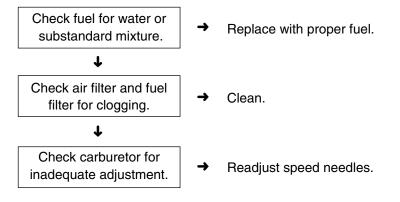
- Reverse the bar occasionally to prevent partial wear
- The bar rail should always be a square. Check for wear of the bar rail. Apply a ruler to the bar and the outside of a cutter. If a gap is observed between them, the rail is normal. Otherwise, the bar rail is worn. Such a bar needs to be corrected or replaced. (F10-4)
- (1) Ruler
- (2) Gap
- (3) No gap
- (4) Chain tilts

## 11. Troubleshooting Guide

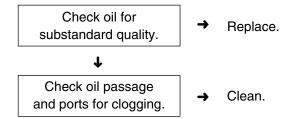
#### Case 1. Starting failure:



#### Case 2. Lack of power/Poor acceleration/Rough idling



#### Case 3. Oil does not come out



When your unit seems to need further service, please consult with our service shop in your area.

## 12. Storage

- 1. Empty the fuel tank and run the engine out of fuel.
- 2. Empty the oil tank.
- 3. Clean the entire unit.
- 4. Store the unit in a dry place out of the reach of children.

# **CHAINSAWS**

# G3200 G3200EZ

#### NOTE:

- 1. Use KOMATSU ZENOAH genuine parts as specified in the parts list for repair and/or replacement.
- 2. KOMATSU ZENOAH does not warrant the machines, which have been damaged by the use of any parts other than those specified by the company.
- 3. When placing parts orders for repair and/or replacement, check if the model name and the serial number are applicable to those specified in the parts list, then use parts number described in the parts list.
- 4. The contents described in the parts list may change due to improvement.
- 5. The parts for the machine shall be supplied seven (7) years after the machine is discontinued. [It is possible that some specific parts may be subject to change of their delivery term and list price within the limit of seven (7) years after the machine is discontinued. It is also possible that some parts may be available even after the limit of seven (7) years.]

#### APPLICABLE SERIAL NUMBERS:

Oct. 2004

G3200: 404766 and up G3200EZ: 400001 and up

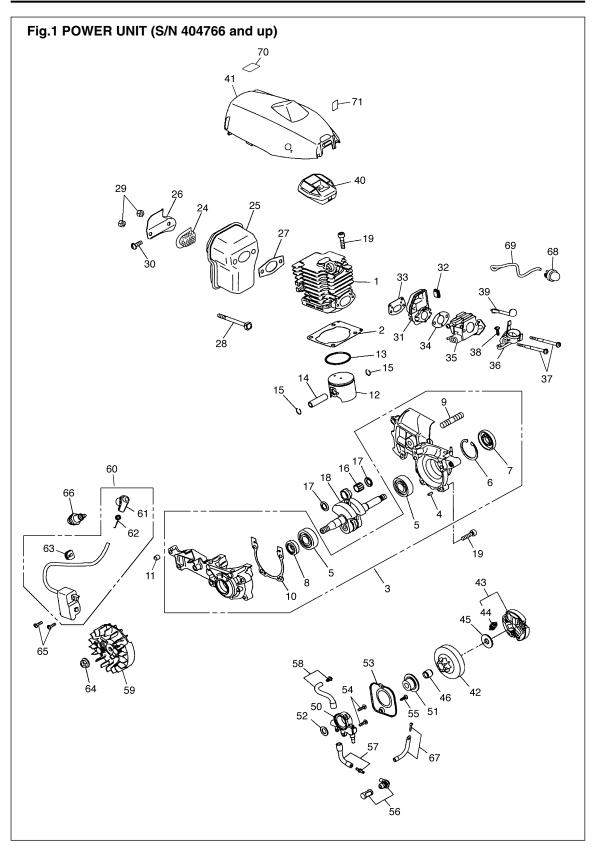
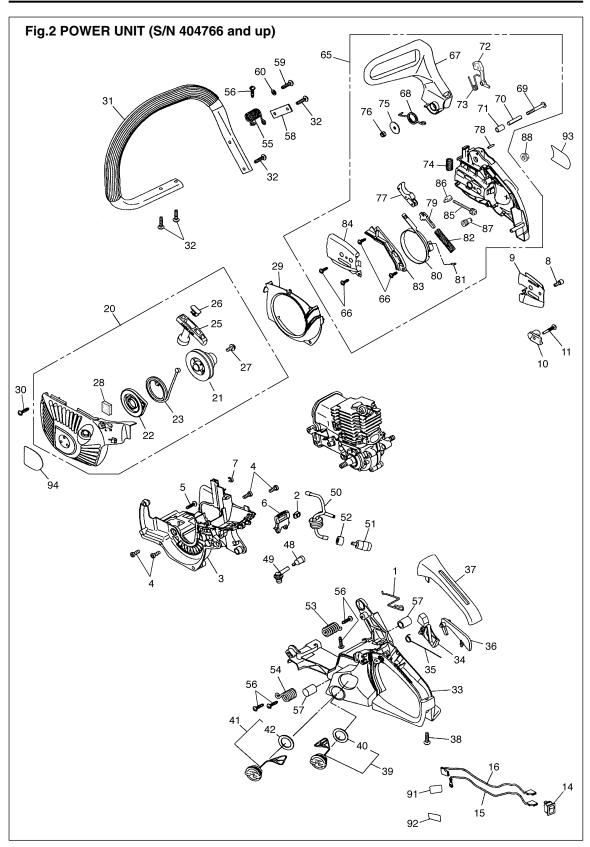


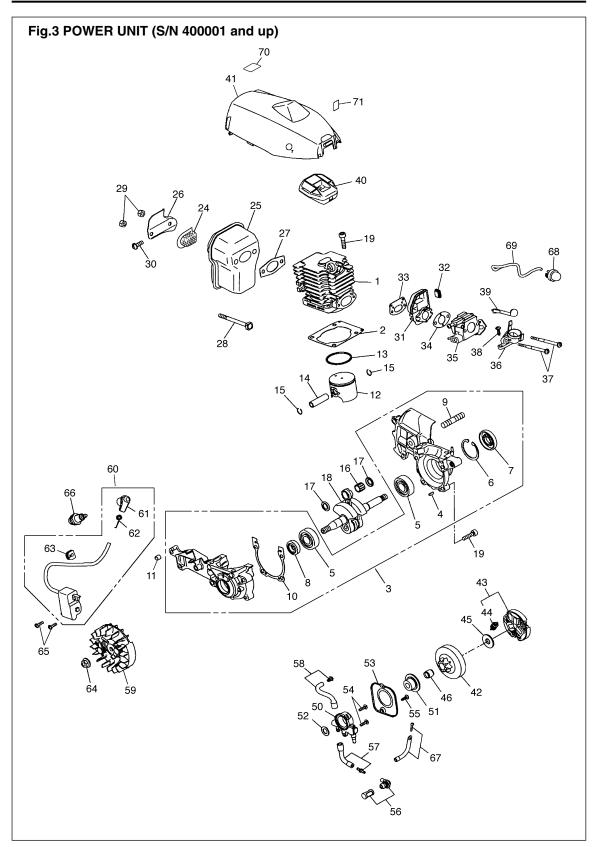
Fig.1 POWER UNIT (S/N 404766 and up)

Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE	Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE
1	848-C30-12A1	CYLINDER	1		56	T2100-23200	FILTER COMP.	1	
2	T2200-14210	GASKET, cyl	1		57	848-C30-6731	PIPE IN COMP.	1	
3	848-C30-2101	CASE ASSY	1		58	T2200-21400	PIPE OUT COMP.	1	
4	2629-21130	• PIN	3		59	848-C35-7111	ROTOR COMP.	1	
5	06030-06201	• BEARING	2		60	848-C35-7121	COIL ASSY	1	
6	04065-03212	SNAPRING ø32	1		61	2850-72110	• CAP	1	
7	2169-21210	• SEAL	1		62	1400-72121	• SPRING	1	
8	848-8AC-3210	• SEAL	1		63		• GROMMET	1	
9	2616-21230	• STUD	1		64	1650-43230	NUT M8xP1.0	1	
10	848-C30-21D1	• GASKET	1		65	2670-55410	SCREW M4xL14 T20	2	
11	848-8Y5-6000	SPACER	1		66	3699-90032-10	SPARK PLUG	1	
12	T2200-41110	PISTON	1		67	T2100-31500	PIPE COMP.	1	
13	T2102-41210		1		68	2850-81900		1	
14	T2200-41310	PIN	1		69	2850-82611		1	
15	3310-41320		2		70		LABEL, caution	1	
16	3310-41410		1		71		LABEL, choke	1	
17	1650-41510	l .	2				,		
18		SHAFT COMP.	1						
19		BOLT TORX M5xL20 T27	8						
24	848-C3A-15B0		1						
25	T2200-15110		1						
26	T2200-15310		1						
27	T2100-15210		1						
1 1	848-C3A-15M1		2						
29	2850-15230		2						
30		SCREW M5xL14 T27	1						
31	848-C30-14A1		1						
32	T2200-31120		1						
33	848-C30-14B1		1						
34		GASKET,carb	1						
35		CARBURETOR ASSY	1						
36	848-C30-82A2		1						
37		BOLT M4x70	2						
38		SCREW TP5(P-tight)xL16 T27	-						
39		ROD CHOKE	1						
40	T2200-83100		1						
41	848-C30-31A2		1						
42		DRUM 1/4x8T Ø60							
43	848-C30-51110								
44	848-C30-51E2		3						
45	T2041-51210		1						
46	3310-51310								
'	5515 51616	52,11110	'						
50	2841-55112	OIL PLIMP	1						
51	2850-55121		1						
52	2850-55211		1						
53	T2200-55610								
54		SCREW M4xL14 T20	2						
55		SCREW TP4(B-tight)xL12 T20	1						
55	2010-04000	OOTILVY IT 4(D-light)XL12 120	∟'_						



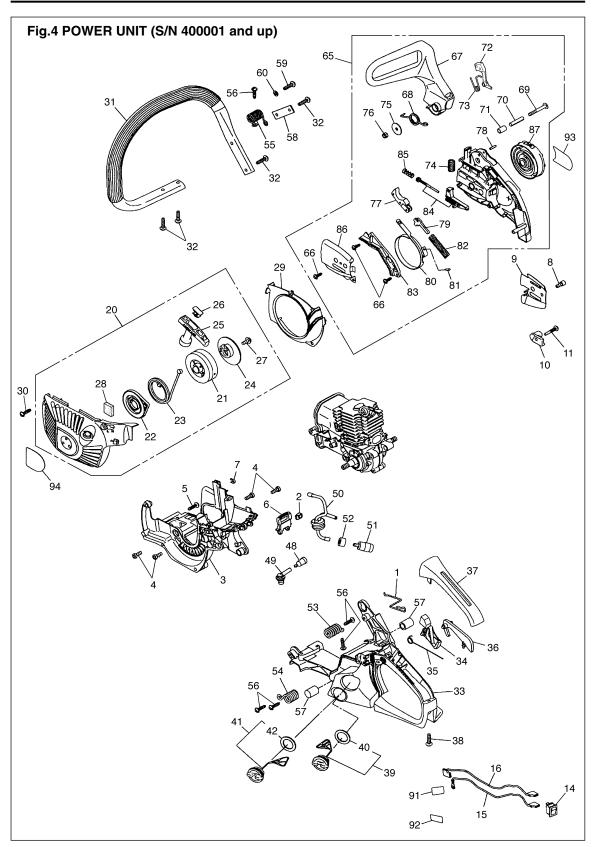
## Fig.2 POWER UNIT (S/N 404766 and up)

Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE	Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE
1	848-C30-82H3	ROD	1		57	848-C30-37D2	HELPER	2	
2	848-C30-82G2	GROMMET	1		58	848-C30-37E1	BAND	1	
3	848-C30-25A2	CASE	1		59	848-825-1601	SCREW TP5(P-tight)xL16 T27	1	
4	848-815-1400	SCREW M5xL14 T27	4		60	01640-20508	WASHER	1	
5	848-825-1911	SCREW TP5(P-tight)xL19 T27	1						
6	848-C30-25C2	KNOB	1		65	848-C3A-5400	BRAKE ASSY	1	
7	848-C30-25D0	CLIP	1		66	2670-54630	SCREW TP4(B-tight)xL12 T20	4	
8	T2200-21230	BOLT	1		67	848-C30-54A2	• GUARD	1	
9	848-C30-6612	PLATE	1		68	2850-54120	• SPRING	1	
10	848-C30-66F1	CATCHER	1		69	2850-54130	• SCREW	1	
11	848-825-1911	SCREW TP5(P-tight)xL19 T27	1		70	2850-54140	• SPACER	1	
					71	2850-54211	• SPACER	1	
14	2850-74102	SWITCH ASSY	1		72	848-C60-5423	• WEIGHT	1	
15	848-C30-72C1	CORD EARTH	1		73	2872-54230	• SPRING	1	
16	848-C30-72B1	CORD SWITCH	1		74	2851-54270	• SPRING	1	
					75	3330-75411	• WASHER	1	
20	848-C35-7502	STARTER ASSY	1		76	3310-53331	• NUT	1	
21	848-C35-75C1	• REEL	1		77	2851-54301	• LEVER COMP.	1	
22	2841-75300	SPRING COMP.	1		78	2851-54350	• ROLLER	1	
23	T2044-75410	• ROPE ø3	1		79	2670-54411	• ARM	1	
					80	T2200-54510	• BAND	1	
25	1400-75170	• KNOB	1		81	3356-24140		1	
26	T2044-75420		1		82	2670-54610		1	
27		SCREW M5xL12	1		83	848-C30-53C2		1	
28	848-C30-74B0		1		84	848-C30-66C1		1	
29	848-C30-74A1		1		85	2841-53240	` '	1	
30	848-825-1911		3		86	848-C33-66K0		1	
31	T2200-32100	. • .	1		87	2671-53230		1	
32	848-825-1901	SCREW TP5(P-tight)xL19 T27	4		88	3350-53410	NUT	1	
33	848-C30-3311	. • .	1						
34	848-C30-33C1		1		91	848-C30-90K0	LABEL	1	
35	3356-33321	SPRING	1		92	848-C30-90L0	LABEL	1	
36	848-C30-33E3	ARM	1		93	848-C3A-90B0	LABEL, cover	1	
37	848-C30-33L1		1		94	848-C3A-90C1	,	1	
38		SCREW TP5(P-tight)xL19 T27	1				,		
39	2841-31801		1						
40	2841-31820		1						
41	2877-31800		1						
42	2841-31820		1						
48	2850-34501	BREATHER ASSY	1						
49	848-C30-85U0		1						
50	848-C30-8530		1						
51	1850-85300		1						
52	2850-34350		1						
53	848-C30-37A1		1						
54	848-C30-37B1		1						
55	848-C30-37C1		1						
56	848-825-1901		5						



#### Fig.3 POWER UNIT (S/N 400001 and up)

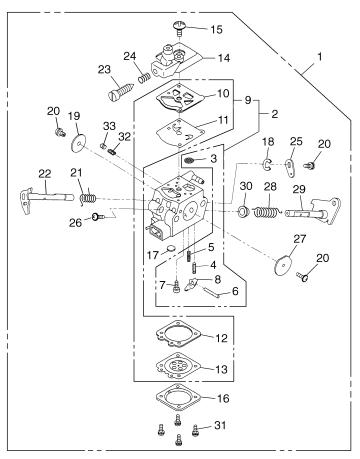
Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE	Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE
1	848-C30-12A1	CYLINDER	1		56	T2100-23200	FILTER COMP.	1	
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3	848-C30-2101	CASE ASSY	1		58	T2200-21400	PIPE OUT COMP.	1	
4	2629-21130	• PIN	3		59	848-C35-7111	ROTOR COMP.	1	
5	06030-06201	• BEARING	2		60	848-C35-7121	COIL ASSY	1	
6	04065-03212	SNAPRING ø32	1		61	2850-72110	• CAP	1	
7	2169-21210	• SEAL	1		62	1400-72121	• SPRING	1	
8	848-8AC-3210	• SEAL	1		63	5500-72130	• GROMMET	1	
9	2616-21230	• STUD	1		64	1650-43230	NUT M8xP1.0	1	
10	848-C30-21D1	• GASKET	1		65	2670-55410	SCREW M4xL14 T20	2	
11	848-8Y5-6000	SPACER	1		66	3699-90032-10	SPARK PLUG	1	
12	T2200-41110	PISTON	1		67	T2100-31500	PIPE COMP.	1	
13	T2102-41210	RING	1		68	2850-81900	PUMP	1	
14	T2200-41310	PIN	1		69	2850-82611	PIPE	1	
15	3310-41320	RING	2		70	848-C3D-99F0	LABEL, caution	1	
16	3310-41410	BEARING	1		71	848-C30-90E0	LABEL, choke	1	
17	1650-41510	WASHER	2						
18	T2200-42000	SHAFT COMP.	1						
19	4820-13180	BOLT TORX M5xL20 T27	8						
24	848-C3A-15B0	ARRESTER	1						
25	T2200-15110	MUFFLER	1						
26	T2200-15310	STAY	1						
27	T2100-15210	GASKET	1						
28	848-C3A-15M1	BOLT	2						
29	2850-15230	NUT	2						
30	848-815-1400	SCREW M5xL14 T27	1						
31	848-C30-14A1	INSULATOR	1						
32	T2200-31120	CAP	1						
33	848-C30-14B1	GASKET, in	1						
34	3330-14121	GASKET,carb	1						
35	848-C3A-8100	CARBURETOR ASSY	1						
36	848-C30-82A2	MANIFOLD	1						
37	2867-82210	BOLT M4x70	2						
38	848-825-1601	SCREW TP5(P-tight)xL16 T27	1						
39	848-C30-82F2	ROD CHOKE	1						
40	T2200-83100	CLEANER	1						
41	848-C30-31A2	COVER	1						
42	T2220-51110	DRUM 3/8x6T ø60	1						
43	848-C30-5121	CLUTCH	1						
44	848-C30-51E2	SPRING	3						
45	T2041-51210	PLATE	1						
46	3310-51310	BEARING	1						
50	2841-55112	OIL PUMP	1						
51	2850-55121	WORM	1						
52	2850-55211	WASHER	1						
53	T2200-55610	COVER	1						
54	2670-55410	SCREW M4xL14 T20	2						
55	2670-54630	SCREW TP4(B-tight)xL12 T20	1						



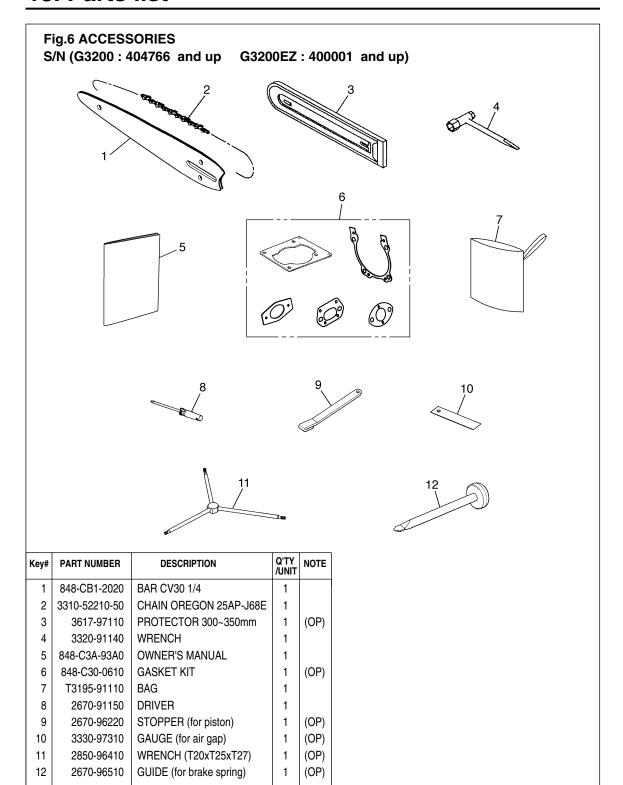
## Fig.4 POWER UNIT (S/N 400001 and up)

Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE	Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE
1	848-C30-82H3	ROD	1		57	848-C30-37D2	HELPER	2	
2	848-C30-82G2	GROMMET	1		58	848-C30-37E1	BAND	1	
3	848-C30-25A2	CASE	1		59	848-825-1601	SCREW TP5(P-tight)xL16 T27	1	
4	848-815-1400	SCREW M5xL14 T27	4		60	01640-20508	WASHER	1	
5	848-825-1911	SCREW TP5(P-tight)xL19 T27	1						
6	848-C30-25C2	KNOB	1		65	848-C36-5401	BRAKE ASSY	1	
7	848-C30-25D0	CLIP	1		66	2670-54630	SCREW TP4(B-tight)xL12 T20	3	
8	T2200-21230	BOLT	1		67	848-C30-54A2	• GUARD	1	
9	848-C30-6612	PLATE	1		68	2850-54120	• SPRING	1	
10	848-C30-66F1	CATCHER	1		69	2850-54130	• SCREW	1	
11	848-825-1911	SCREW TP5(P-tight)xL19 T27	1		70	2850-54140	• SPACER	1	
					71	2850-54211	• SPACER	1	
14	2850-74102	SWITCH ASSY	1		72	848-C60-5423	• WEIGHT	1	
15	848-C30-72C1	CORD EARTH	1		73	2872-54230	• SPRING	1	
16	848-C30-72B1	CORD SWITCH	1		74	2851-54270	• SPRING	1	
					75	3330-75411	• WASHER	1	
20	848-C30-7502	STARTER ASSY	1		76	3310-53331	• NUT	1	
21	848-C30-7520	REEL COMP.	1		77	2851-54301	• LEVER COMP.	1	
22	2841-75300	SPRING COMP.	1		78	2851-54350	• ROLLER	1	
23	T2044-75410	• ROPE ø3	1		79	2670-54411	• ARM	1	
24	T2044-75520	• PULLEY	1		80	T2200-54510	• BAND	1	
25	1400-75170	• KNOB	1		81	3356-24140	• ROLLER	1	
26	T2044-75420	• KNOB CAP	1		82	2670-54610	• SPRING	1	
27	T1812-75150	SCREW M5xL12	1		83	848-C30-53C2	• COVER	1	
28	848-C30-74B0	• CUSHION	1		84	T2200-53200	• LINK A	1	
29	848-C30-74A1	COVER	1		85	T2200-53280	• SPRING	1	
30	848-825-1911	SCREW TP5(P-tight)xL19 T27	3		86	848-C30-66C1	• PLATE(B)	1	
31	T2200-32100	HANDLE	1		87	848-C30-5341	NUT ASSY	1	
32	848-825-1901	SCREW TP5(P-tight)xL19 T27	4						
33	848-C30-3311	HANDLE COMP.	1		91	848-C30-90K0	LABEL	1	
34	848-C30-33C1	LEVER	1		92	848-C30-90L0	LABEL	1	
35	3356-33321	SPRING	1		93	848-C3D-90B0	LABEL, cover	1	
36	848-C30-33E3	ARM	1		94	848-C3A-90C0	LABEL, recoil	1	
37	848-C30-33L1	COVER	1						
38	848-825-1911	SCREW TP5(P-tight)xL19 T27	1						
39	2841-31801	CAP ASSY	1						
40	2841-31820	• GASKET	1						
41	2877-31800	CAP ASSY	1						
42	2841-31820	• GASKET	1						
48	2850-34501	BREATHER ASSY	1						
49	848-C30-85U0		1						
50	848-C30-8530		1						
51	1850-85300		1						
52	2850-34350		1						
53	848-C30-37A1		1						
54	848-C30-37B1	SPRING M	1						
55	848-C30-37C1		1						
56	848-825-1901	SCREW TP5(P-tight)xL19 T27	5						

#### Fig.5 CARBBURETOR COMPONENTS



Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE	Key#	PART NUMBER	DESCRIPTION	Q'TY /UNIT	NOTE
1	848-C3A-8100	CARBURETOR ASSY	1		19	3310-81341	• VALVE	1	
2	848-C3A-0630	REBUILD-KIT	1	(OP)	20	2880-81470	• SCREW	3	
3	3306-81380	•• SCREEN	1		21	2670-81410	SPRING	1	
4	3356-81310	• • VALVE	1		22	848-C3A-81T0	• SHAFT	1	
5	2841-81270	•• SPRING	1		23	2630-81330	• SCREW	1	
6	3310-81250	• • PIN	1		24	3350-81380	SPRING	1	
7	3310-81240	•• SCREW	1		25	2670-81440	• LEVER	1	
8	3310-81230	••LEVER	1		26	2850-81190	• SCREW	1	
9	T2100-06020	• • GASKET KIT	1	(OP)	27	2841-81450	• VALVE	1	
10	3304-81140	••• GASKET	1		28	T2002-81350	• SPRING	1	
11	1172-81150	••• DIAPHRAGM	1		29	848-C30-81E0	• SHAFT	1	
12	2850-81290	••• GASKET	1		30	2850-81430	BUSHING	1	
13	3310-81260	••• DIAPHRAGM	1		31	3310-81351	• SCREW	4	
14	2850-81120	• COVER	1		32	2810-81530	SPRING	1	
15	3310-81130	• SCREW	1		33	848-C71-80N0	• PISTON	1	
16	3310-81280	• COVER	1						
17	1480-81420	• PLUG	1						
18	1148-81390	• RING	1						



# RedMax CHAIN SAWS LIMITED WARRANTY

**EMISSION-RELATED PARTS**, FOR TWO (2) YEARS FROM THE DATE OF ORIGINAL DELIVERY, KOMATSU ZENOAH AMERICA INC. (THE COMPANY), THROUGH ANY REDMAX DEALER, WILL REPAIR OR REPLACE, FREE OF CHARGE, FOR THE ORIGINAL AND EACH SUBSEQUENT PURCHASER, ANY PART OR PARTS FOUND TO BE DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP. EMISSION-RELATED PARTS ARE:

## THE CARBURETOR ASSY, COIL ASSY, ROTOR, SPARKPLUG, AIR FILTER, FUEL FILTER, INTAKE MANIFOLD, AND THE GASKETS

**ALL OTHER PARTS EXCEPT ABOVE PARTS**, FOR TWO (2) YEARS OF HOME USE, 1 YEAR COMMERCIAL USE AND NINETY (90) DAYS FOR RENTAL USE FROM THE DATE OF ORIGINAL PURCHASE, THE COMPANY, THROUGH ANY REDMAX DEALER, WILL REPAIR OR REPLACE, FREE OF CHARGE, FOR THE ORIGINAL PURCHASER, ANY PART OF PARTS FOUND TO BE DEFECTIVE IN MATERIAL AND/OR WORKMANSHIP. **THIS IS THE EXCLUSIVE REMEDY.** 

THE PURCHASER SHALL BEAR COSTS OF TRANSPORTING THE UNIT TO AND FROM THE REDMAX DEALER.

THE PURCHASER SHALL NOT BE CHARGED FOR DIAGNOSTIC LABOR WHICH LEADS TO THE DETERMINATION THAT A WARRANTED PART IS DEFECTIVE, IF THE DIAGNOSTIC WORK IS PERFORMED AT THE REDMAX DEALER.

THE PURCHASER OR OWNER IS RESPONSIBLE FOR THE PERFORMANCE OF THE REQUIRED MAINTENANCE AS DEFINED BY THE MANUFACTURER IN THE OWNER/OPERATOR MANUAL.

ANY WARRANTED PART WHICH IS NOT SCHEDULED FOR REPLACEMENT AS REQUIRED MAINTENANCE, OR WHICH IS SCHEDULED ONLY FOR REGULAR INSPECTION TO THE EFFECT OF "REPAIR OR REPLACE AS NECESSARY" SHALL BE WARRANTED FOR THE WARRANTY PERIOD.ANY WARRANTED PART WHICH IS SCHEDULED FOR REPLACEMENT AS REQUIRED MAINTENANCE SHALL BE WARRANTED FOR THE PERIOD OF TIME UP TO THE FIRST SCHEDULED REPLACEMENT POINT FOR THE PART.

ANY REPLACEMENT PART THAT IS EQUIVALENT IN PERFORMANCE AND DULABILITY MAY BE USED IN NON-WARRANTY MAINTENANCE OR REPAIRS, AND SHALL NOT REDUCE THE WARRANTY OBLIGATION OF THE COMPANY.

THE COMPANY IS LIABLE FOR DAMAGES TO OTHER ENGINE COMPONENTS CAUSED BY THE FAILURE OF A WARRANTED PARTS STILL UNDER WARRANTY.

THE WARRANTY DOES NOT APPLY TO THOSE UNITS WHICH HAVE BEEN DAMAGED BY NEGLIGENCE OF INSTRUCTION LISTED IN THE OWNER/OPERATOR MANUAL FOR PROPER USE AND MAINTENANCE OF THE UNITS, ACCIDENTAL MISHANDLING, ALTERATION, ABUSE, IMPROPER LUBULICATION, USE OF ANY PARTS OR ACCESSARIES OTHER THAN THOSE SPECIFIED BY THE COMPANY, OR OTHER CAUSES BEYOND THE CONPANY'S CONTROL.

THIS WARRANTY DOES NOT COVER THOSE PARTS REPLACED BY NORMAL WEAR OR HARMLESS CHANGES IN THEIR APPEARANCE.

#### THERE ARE NO OTHER EXPRESS WARRANTIES.

IMPLIED WARRANTIES INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO TWO (2) YEARS FOR HOME USE, ONE (1) YEAR FOR COMMERCIAL USE AND NINETY (90) DAYS FOR RENTAL USE, FROM THE ORIGINAL DELIVERY DATE.

## LIABILITIES FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE UNDER ANY AND ALL WARRANTIES ARE EXCLUDED.

SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMINATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

IF YOU NEED TO OBTAIN INFORMATION ABOUT THE NEAREST SERVICE CENTER, PLEASE CALL KOMATSU ZENOAH AMERICA INC. AT (770)-381-5147.

**IMPORTANT:** YOU WILL RECEIVE A WARRANTY REGISTRATION CARD AT TIME OF PURCHASE.PLEASE FILL OUT THE CARD AND SEND IT TO RedMax / KOMATSU ZENOA AMERICA WITHIN SEVEN (7) DAYS.BE SURE TO KEEP A COPY FOR YOUR RECORDS.



KOMATSU ZENOAH AMERICA INC. 4344 Shackleford Road Suite 500 Norcross, Georgia 30093

#### RedMax

#### Garantie limitée des tronçonneuses

Pièces en rapport avec les émissions de gaz d'échappement : KOMATSU ZENOAH AMERICA INC., par l'intermédiaire de n'importe quel revendeur RedMax, réparera gratuitement ou remplacera gratuitement pour l'acheteur initial et chaque acheteur successif toute(s) pièce(s) se révélant de constitution et/ou de montage défectueux pendant deux (2) ans à compter de la date initiale de livraison d'une unité. Les pièces en rapport avec les émissions de gaz d'échappement sont:

l'assemblage carburateur, l'assemblage bobine, le rotor, la bougie, le filtre à air, le filtre à carburant, la tubulure d'admission et les joints

Toutes les pièces autres que celles mentionnées ci-dessus, deux (2) ans d'utilisation domestique, 1 an d'utilisation commerciale et quatre-vingt-dix (90) jours pour la location à compter de la date d'achat initial. La société, par l'intermédiaire d'un distributeur RedMax, réparera ou remplacera toute(s) pièce(s), sans frais et au bénéfice de l'acheteur original, en prenant en charge les frais de pièces et/ou de main d'œuvre. Telles sont les limites de la qarantie.

Le coût du transport de l'unité jusqu'au revendeur RedMax et depuis celui-ci sera à la charge de l'acheteur.

L'acheteur ne supportera pas le coût de main d'oeuvre du diagnostic qui amène à la conclusion qu'une pièce garantie est défectueuse, si ce diagnostic est effectué chez le revendeur RedMax.

L'acheteur ou propriétaire a pour responsabilité d'effectuer l'entretien obligatoire tel que défini par le fabricant dans le manuel du propriétaire/de l'utilisateur.

Toute pièce garantie dont le remplacement n'est pas prévu dans le cadre de l'entretien obligatoire, ou pour laquelle est seulement prévue une inspection périodique pour "remplacement ou réparation si nécessaire" sera garantie pour la période de garantie. Toute pièce garantie arrivée à l'échéance de son premier remplacement prévu sera garantie jusqu'à celui-ci.

Toute pièce de rechange équivalente en performance ou en durabilité peut être utilisée pour l'entretien hors-garantie ou les réparations hors-garantie, et ce sans réduire l'obligation de garantie incombant à la société.

La société sera tenue responsable des dommages aux autres composants du moteur causés par la défaillance de pièce(s) garantie(s) en période de garantie.

La garantie ne s'applique pas aux unités endommagées par suite de: négligence dans la mise en oeuvre des instructions spécifiées dans le manuel du propriétaire/de l'utilisateur en vue d'une utilisation et d'un entretien correct, fausse manœuvre accidentelle, modification, utilisation abusive, lubrification incorrecte, utilisation de pièces ou d'accessoires autres que ceux spécifiés par la société, ou autres causes hors du contrôle de la société.

Cette garantie ne couvre pas les pièces remplacées en raison de leur usure normale ou de changements d'apparence sans effets.

Il n'existe aucune autre garantie explicite.

Les garanties implicites, y compris la valeur marchande et la valeur d'usage pour une utilisation particulière, sont limitées à deux (2) ans d'utilisation domestique, un (1) an d'utilisation commerciale et quatre-vingt-dix (90) jours pour la location, à compter de la date originale de livraison.

Les responsabilités pour les dommage conséquents ou incidents sont exclues de toutes les garanties.

Certaines provinces n'autorisant pas les limitations à la durée des garanties implicites, ou les exclusions ou limitations relatives aux dommages incidents ou conséquents, la limitation indiquée ci-dessus peut ne pas vous être applicable.

Cette garantie vous donne des droits juridiques spécifiques, et vous pouvez également jouir d'autres droits variant d'une province à l'autre.

Si vous désirez obtenir des informations sur le centre de service le plus proche, veuillez appeler KOMATSU ZENOAH AMERICA INC. au (770)-381-5147

**Note importante:** vous recevrez une carte d'enregistrement de garantie au moment de l'achat. Veuillez la remplir et l'adresser à RedMax / KOMATSU ZENOAH AMERICA sous sept (7) jours en prenant soin de conserver une copie pour vous.



KOMATSU ZENOAH AMERICA INC. 4344 Shackleford Road Suite 500 Norcross, Georgia 30093



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